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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,863	02/09/2004	Michael A. Rothman	42P18513	1483

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EXAMINER

PATEL, ANAND B

ART UNIT PAPER NUMBER

2116

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/775,863	ROTHMAN ET AL.	
	Examiner	Art Unit	
	Anand Patel	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 8-20 is/are rejected.
- 7) ☒ Claim(s) 5-7 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: there is no Brief Summary of the Invention.

Appropriate correction is required.

Claim Objections

2. Claims 2-7, 9-10, 12, 12-17, 19-21 are objected to because of the following informalities: terms “A method”, “An apparatus”, and “A processing system” should be changed to “The method”, “The apparatus”, and “The processing system”, respectively.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 8-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims contain a machine accessible medium that is described in the specification as including non-statutory transmission and communication media.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2116

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 1-3, 18-19 are rejected under 35 U.S.C. 102(a) as being anticipated by European Patent

Application No 02354066.9 to Neuman et al (Neuman).

- As per claim 1, Neuman discloses a method comprising:
 - Initializing a processing system according to predetermined basic input/output system (BIOS) settings for the processing system (inherent given the running of software 302);
 - Booting an operating system (OS) on the processing system (inherent given the running of software 302 and the context switching to SMM mode); and
 - Providing a virtual runtime interface that allows a user to modify the BIOS settings for the processing system after the OS has been booted (300, 400; paragraphs 22-24).
- As per claim 2, Neuman discloses the method further comprising:
 - Receiving user input data that requests invocation of the virtual runtime interface (figures 3, 4; paragraph 22); and
 - Automatically providing the virtual runtime interface, in response to receiving the user input data (paragraph 22).
- As per claim 3, Neuman discloses the method further comprising:
 - Receiving user input data through the virtual runtime interface, wherein the user input data specifies a modified BIOS setting (paragraphs 10, 22, 26-27); and
 - Saving the modified BIOS setting to be implemented upon a subsequent initialization of the processing system (paragraphs 26-27).
- As per claim 18, Neuman discloses a processing system comprising:
 - A processor (202);
 - Memory communicatively coupled to the processor (228; figure 2);
 - Basic input/output system (BIOS) settings stored in the memory (252; figure 2); and

Art Unit: 2116

- Instructions stored in the memory, wherein the instructions, when executed by the processor, cause the processing system to perform operations comprising:
 - Detecting a BIOS configuration trigger event after the processing system has booted to an operating system (OS) (paragraphs 10, 22); and
 - In response to detecting the BIOS configuration trigger event, automatically providing a virtual runtime interface that allows a user to modify the BIOS settings for the processing system (paragraph 22).
- As per claim 19, Neuman discloses the processing system wherein the memory comprises:
 - A first memory device that contains the BIOS settings (228); and
 - A second memory device that contains the instructions (210).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neuman in view of US Patent No 6823451 to Gulick et al (Gulick).

- As per claims 4, 20, Neuman discloses the method wherein the operation of providing a virtual runtime interface comprises transitioning the processing system from an OS context to a system management mode (SMM) context (paragraph 22);

Neuman fails to disclose switching contexts based on a timeout. Gulick teaches:

Art Unit: 2116

- Determining whether an amount of time spent in the SMM context approaches an SMM time limit (column 9, lines 26-31); and
- If the amount of time spent in the SMM context approaches the SMM time limit, automatically transitioning from the SMM context back to the OS context (column 9, lines 31-36).

An advantage of the system taught by Gulick is the ability to improve privacy and security issues (column 2, lines 21-47). It would have been obvious to one of ordinary skill in the art at the time of invention to modify Neuman with the timeout feature as taught by Gulick. Motivation to modify is to improve system security and privacy.

Allowable Subject Matter

9. Claims 5-7, 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Prior art fails to disclose or suggest wherein the operation of providing a virtual runtime interface comprises providing a BIOS setup interface that appears persistent to the user by automatically interleaving two or more SMM contexts with two or more OS contexts. Prior art also fails to disclose or suggest saving state information from the SMM context before transitioning from the SMM context back to the OS context, and after transitioning back to the OS context, determining whether a configuration session has been completed and if the configuration session has not been completed, automatically transitioning from the OS context back to the SMM context.

Art Unit: 2116

Conclusion

10. Examiner notes that should claims 8-17 be amended to overcome the rejection under 35 U.S.C. 101, the prior art used in the rejections of the other claims might be used to reject the subject matter in the amended claims.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent No 6065125 to Shiell et al discloses switching to an SMM context to change pre-boot settings.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand Patel whose telephone number is (571) 272-7211. The examiner can normally be reached on Mon-Fri 8AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ABP


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